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ABSTRACT

This research study used the Delphi technique to determine the ideal content of a college-level outdoor leadership course for land-based outdoor pursuits in the Pacific Northwest. Topics were generated and value-rated by 61 Pacific Northwest outdoor leaders using a Likert-type scale in three separate questionnaires. Thirty-five topics were retained in the ideal content, of which the top 10 were: (1) risk management plans; (2) judgement; (3) wilderness ethics; (4) first aid; (5) analyzing risks; (6) minimum impact practices; (7) outdoor leadership objectives; (8) hazard analysis for hypothermia; (9) backcountry first aid; and (10) minimum impact philosophy. An outdoor leadership course outline constructed from research results included philosophy of outdoor leadership, risk management, decision making, outdoor leadership methods, teaching principles, small group dynamics in the outdoors, environmental awareness skills, pre-trip planning, hazards analysis, and map reading and interpretation. Tables list final rankings and mean scores of the 35 consensus topics and the 23 topics rated least important. An appendix provides a copy of the third and final questionnaire with ratings for 176 topics. (LFL)

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THE CONTENT OF A COLLEGE - LEVEL OUTDOOR LEADERSHIP COURSE

by

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ABSTRACT

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THE CONTENT OF A COLLEGE - LEVEL OUTDOOR LEADERSHIP COURSE

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The research study was a consensus on the content of a college-level outdoor leadership course for land-based outdoor pursuits in the Pacific Northwest. The outdoor leadership course topics were generated and rated by 61 Pacific Northwest based outdoor leaders.

The Delphi technique was used for the data collection. The first questionnaire had respondents list topics which should be included in a college-level outdoor leadership course. Topics generated by the first questionnaire were reviewed and reduced to 176 generic statements encompassing related ideas. The second questionnaire contained the revised list of topics and a Likert-type scale which allowed the respondents to rate the value of each topic. In the final questionnaire the respondents were provided with distribution by percent of the group rating on each topic and their previous rating. The outdoor leaders were instructed to review this feedback information and to rate each topic again.

Based upon the results from the analysis of data, 35 topics were retained as the content of a college-level outdoor leadership course and 23 topics were of least importance and should not be considered for inclusion in an outdoor leadership course. The top ten topics were as follows: (1) risk management plans (minimizing risks, emergency plans, prevention); (2) judgement; (3) wilderness ethics; (4) first aid; (5) analyzing risks; (6) minimum impact practices; (7) outdoor leadership objectives; (8) hazard analysis: hypothermia; (9) backcountry first aid; and (10) minimum impact philosophy.

Until the last decade, outdoor leaders in the Northwest received their leadership training through experience or participation in a mountaineering guide service. Frequently an aspiring leader would apprentice under the direction of an experience mountain guide for several seasons. This style of training changed as the participation rate in outdoor pursuits increased. The spiraling demand in the seventies for qualified leaders has resulted in many colleges and universities developing courses in outdoor leadership.

Eight colleges and universities in the Pacific Northwest purported to teach outdoor leadership courses. Few of these courses contained similar content descriptions, indicating that the topics currently covered in outdoor leadership courses are generally the subjective choice of each instructor. Emphasis by individuals on topics of their own preference may, however, lead to oversight. In the field of outdoor leadership, where the leader has a serious responsibility to his or her charges, the omission of certain information could prove critical. The content of an outdoor leadership course, therefore, should include the best and most important information available. The investigator felt that a consensus of the experts in the field--practitioners and recreation educators who are involved with the subject--was the optimal means of procuring a framework for that information.

The purpose of this study was to gain a consensus on the content of a college level outdoor leadership course for land-based outdoor pursuits for the Pacific Northwest region. The consensus was elicited through a Delphi survey questionnaire of land-based outdoor pursuit leaders in the Pacific Northwest. The ratings of outdoor leadership course topics generated by selected outdoor leaders in the Pacific Northwest would identify the topics which should be included in an outdoor leadership course..

The subjects selected as respondendts in this study were outdoor leaders. These leaders were involved in leading land-based outdoor pursuits in the Pacific Northwest region. The identification of specific outdoor leaders included in

the study was accomplished through a review of the following clearinghouse sources: (1) 1980 WORLDWIDE ADVENTURE TRAVELGUIDE published by the American Adventurer Association, Seattle, Washington; (2) DIRECTORY OF PROGRAMS IN OUTDOOR ADVENTURE ACTIVITIES edited by Alan Hale, 1975; (3) DIRECTORY OF OUTDOOR EDUCATION DEGREE PROGRAMS IN HIGHER EDUCATION edited by Russell Bachert, Jr., 1977; (4) 1979-1980 SPRE CURRICULUM CATALOG published by the Society of Park and Recreation Educators. This review identified outdoor leaders or agencies with leaders.

In addition to the clearinghouse sources listed above, a review was made of the college catalogs located in the University of Oregon library collection. The review focused on locating leaders of outdoor pursuit courses which are taught at colleges and universities in the Pacific Northwest.

Additional leaders were located by contacting the directors of the outdoor programs sponsored by city recreation departments. These outdoor programs were located through an extensive review of telephone directories of the major cities in the Pacific Northwest.

Prior to inviting the outdoor leaders to participate in this study, a thorough screening process was conducted to insure that the individual was in fact a land-based outdoor leader. A total of 239 leaders or their agencies were contacted by telephone to confirm their status. There were exceptions to this screening process when the leader's status was personally known by the investigator.

This exhaustive subject selection process produced 96 potential respondents. Each identified outdoor leader was contacted by mail and asked to participate in the study. Included with the letter was a reply postcard which allowed the respondent to list two additional outdoor leaders who along with themselves, might be interested in participating in the study. The leaders listed on the return postcards were also screened, contacted by letter and asked to participate as well as list two additional outdoor leaders. Thsi increasing circle form of subject selection, known as the "snowball technique" (Coleman, 1959), resulted in

104 respondents for the first mailing in the study.

The first questionnaire had the respondents list the topics which they felt should comprise the content of a college-level outdoor leadership course. No information regarding specific content was given. The open-ended response mode was used. The instructions for this questionnaire explained that the proposed course would be for individuals who are interested in leading year-round land-based outdoor pursuits in the Pacific Northwest.

Information obtained from the first questionnaire was essential for designing the second one. The topics generated by respondents to the first questionnaire were reviewed and combined to form 176 generic statements which encompassed related ideas. This process was necessary to clarify the topics and to avoid duplication.

The second questionnaire contained the combined list of 176 topics and a Likert-type scale. All respondents were asked to rate the importance of each topic to be included in a college-level outdoor leadership course. The response mode selected included four potential ratings. The values of the ratings were between very important and not important. The descriptive values of the ratings were as follows:

VI = Very Important: A topic you feel is very important and must be included in a college-level outdoor leadership course.

I = Important: A topic you feel is important to include in a college-level outdoor leadership course.

LI = Of Little Importance: A topic you feel is important but not necessary to include in a college-level outdoor leadership course.

NI - Not Important: A topic you feel is not important and should be omitted.

U = Unable to Evaluate: A topic you are unfamiliar with or do not feel qualified to judge its value.

All respondents to the second questionnaire were sent the third questionnaire (see Appendix A) which was similar to the second except that the outdoor leaders were provided with distribution by percent of the group rating on each topic. Respondents were also provided with their own previous ratings of the topics. The outdoor leaders were instructed to review each topic, the percent of responses and their own previous rating. Based upon this feedback information, the respondents were asked to rate each topic again and to state briefly their reason for any rating which appeared to be different from the rating of most of the other respondents.

Following the second and third questionnaires, the rating values used in the questionnaires (VI, I, LI, NI, U) were coded as 4, 3, 2, 1, and missing data. The mean, standard deviation, median, percentage distribution and frequency ratings were calculated for each topic.

The data from questionnaires two and three were analyzed using the Statistical Package for Social Sciences (SPSS). The data were calculated on the IBM 4341 computer system.

The consensus on the content of an outdoor leadership course included those topics which have a mathematical mean of 3.25 or above. On a truncated 4 point scale, the value 3.25 can be represented as a response of "very important." If a mean response is at that value or above, it would indicate the respondents would place priority for the inclusion of that specific topic.

TABLE 1

FINAL RANKING AND MEAN SCORES OF THE CONSENSUS TOPICS OF AN OUTDOOR LEADERSHIP COURSE BY OUTDOOR LEADERS IN THE PACIFIC NORTHWEST

Rank	Mean	Topic Number	Topic
1	3.79	146	Risk Management Plans (minimizing risks, emergency plans, prevention)
2	3.78	147	Judgement
3	3.74	70	Wilderness Ethics
4	3.72	50	First Aid
5	3.72	171	Analyzing Risks
6	3.72	165	Minimum Impact Practices
7	3.71	1	Outdoor Leadership Objectives
8	3.71	79	Hazards Analysis: Hypothermia
9	3.66	148	Backcountry First Aid
10	3.63	28	Minimum Impact Philosophy
11	3.57	51	Pre-Trip Planning: Selection of Location
12	3.57	164	Liability Considerations
13	3.54	125	Outdoor Ethics
14	3.53	141	Outdoor Leadership Methods
15	3.48	81	Small Group Dynamics in the Outd s
16	3.45	80	Teaching Methods and Techniques
17	3.44	69	Advanced First Aid
18	3.44	97	Hazards Analysis: Hyperthermia
19	3.44	56	Pre-Trip Planning: Single and Multi-Day or Week
20	3.41	86	Extended First Aid for Long Trips (professional help unavailable)
21	3.40	31	Assessment of Individual Capabilities
22	3.38	130	Pre-Trip Planning: Travel Time, Length (Itinerary)
23	3.36	150	Map Reading and Interpretation
24	3.36	11	Small Group Dynamics
25	3.34	91	Decision-Making
26	3.34	9	Program Goals
27	3.33	159	Teaching Principles for Leaders
28	3.33	17	Avalanche Awareness
29	3.32	82	Environmental Awareness Skills
30	3.31	137	Mountain Medicine
31	3.30	105	Assessment of Group Capabilities
32	3.29	175	Philosophy of Outdoor Leadership
33	3.27	10	Problem Solving, Analysis
34	3.26	93	Food Planning
35	3.25	42	Avalanche Safety

TABLE 2

FINAL RANKING MEAN SCORES OF LEAST IMPORTANT TOPICS FOR AN OUTDOOR LEADERSHIP COURSE BY OUTDOOR LEADERS IN THE PACIFIC NORTHWEST

Rank	Mean	Topic Number	Topic
176	1.38	3	Basic Trap and Snare Techniques
175	1.41	89	Outdoor Arts and Crafts
174	1.46	136	Basic Principles of Anthropology
173	1.53	102	Outdoor Songs
172	1.58	67	Transportation: Automobile Mechanics
171	1.71	16	Identification of Rocks
170	1.72	88	Transportation: Driver's Education (Driving Techniques)
169	1.73	41	Fishing
168	1.75	145	History of the Environmental Movement
167	1.76	20	Basic Principles of Northwest History
166	1.79	132	Photography
165	1.81	153	Identification of Birds
164	1.84	47	Theories of Personality
163	1.86	39	Basic Principles of Botany
162	1.89	73	Basic Principles of Zoology, Wildlife
161	1.91	63	Humanistic Psychology
160	1.92	62	Identification of Animals
159	1.95	142	Outdoor Living Skills: Campcrafts, Woodcrafts
158	1.95	68	Basic Principles of Geology
157	1.95	58	Star Navigation
156	1.97	95	Social Psychology
155	1.97	94	Basic Principles of Natural History
154	1.98	140	Philosophies of Education

The 35 topics contained in Table 1 represent the consensus on the content of an outdoor leadership course for land-based outdoor pursuits in the Pacific Northwest. The topics are ranked by mean scores except in the case of equal ratings, then the median and standard deviation are considered. The mean scores ranged from 3.79 to 3.25 for the topics ranked 7 through 35 indicating the respondents felt these topics were most important. The 10 top rated topics in the table are the same 10 as in the results of the second questionnaire only in a different order. It is important to note that all five emergency medical topics are included in the consensus content as well as 16 topics that cover safety and the protection of the natural resources.

Table 2 shows the ranking and mean scores of the least important topics for an outdoor leadership course. The topics are ranked by mean scores except in the case of equal ratings, then the median and standard deviation are considered. The mean score ranged from 1.98 to 1.38 for the topics ranked 154 through 176 indicating that respondents felt these 23 topics were of least importance and should not be considered for inclusion in an outdoor leaderhsip course.

It is important to ntoe that technical outdoor skills were not ranked high in the final questionnaire. The ratings and the comments by the outdoor leaders indicated that skills are important but should be acquired prior to the outdoor leadership course, either through experience or by completing a series of prerequisite courses. This allows more time for discussion and application of the most important topics in the outdoor leadership course. An outdoor leader, however, must be knowledgeable and proficient in the technical skills required of the outdoor pursuit they are leading.

In addition to the technical outdoor skills, the emergency medical techniques should also be acquired prior to the outdoor leadership course. Although the

emergency medical topics were rated very high, the consistent comments by the outdoor leaders and the investigator's experience indicates the topics should be completed prior to the outdoor leaderhsip course. From a practical point of view, more time could be allotted to the consensus topics in an outdoor leadership course if the participants were required to meet prerequisite criteria.

The application of the research based upon the rating and comments of the respondents is an outdoor leadership course outline. The topical outline should be considered as a guideline for the content of a college-level outdoor leadership course. It must be understood that these topics are based on opinions only. They may not be the best topics for such a course but they are opionions of what is best and they are further the opinions of people currently involved in leading land-based outdoor pursuits. The prerequisites for the outdoor leaderhsip course should include emergency medical training and skill training associated with the outdoor pursuits.

OUTDOOR LEADERSHIP COURSE OUTLINE (Topical Headings)

I. Philosophy - includes Philosophy of Outdoor Leadership, Objective and Outdoor Program Goals

II. Risk Management - includes Risk Management Plans (Minimizing Risks, Emergency Plans, Prevention), Analyzing Risks, Liability Considerations, as well as Assessment of Individual and Group Capabilities

III. Decision-Making - includes Judgement and Provlem Solving Analysis

IV. Outdoor Leadership Methods

V. Teaching Principles - includes Teaching Methods and Techniques for Outdoor Leaders

VI. Small Group Dynamics in the Outdoors

VII. Environmental Awareness Skills - includes Wilderness and Outdoor Ethics, as well as Minimum Impact philosophy and Practices

VIII. Pre-Trip Planning - includes Single, and Multi-Day Trips, Selection of Location, Itinerary (Travel Time, Length), and Food Planning

IX. Hazards Analysis - includes Hypothermia, Hyperthermia and Avalanche Awarness and Safety

X. Map Reading and Interpretation

The topics listed in the outdoor leadership course outline are combined to include topics of similar or parallel content. Additionally, the topics are ordered to reflect a recommended sequence of presentation in the proposed outdoor leadership course.

It is important to emphasize that the outdoor leadership course outline is a guideline for the recreaiton educators teaching the college-level courses. The educators will rely on their experience in ordering the content of a college-level outdoor leadership course, but the recommended topics should be included in the course or prerequisite courses.

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APPENDICES

OUTDOOR LEADERSHIP QUESTIONNAIRE #3

OUTDOOR LEADERSHIP QUESTIONNAIRE III

NAME_____

Directions

Please review each topic, the percent of responses, and your previous rating.

After brief consideration, rate the importance of the topics which should be included in a college-level outdoor leadership course for year-round land-based outdoor pursuits in the Pacific Northwest region.

Please use the following scale:

VI = Very Important: A topic you feel is very important and must be included in a college-level outdoor leadership course.

I = Important: A topic you feel is important to include in a college-level outdoor leadership course.

LI = Of Little Importance: A topic you feel is relevant but not necessary to include in a college-level outdoor leadership course.

NI = Not Important: A topic you feel is not important and should be omitted.

U = Unable to Evaluate: A topic you are unfamiliar with or do not feel qualified to judge its value.

NOTE: Keep in mind the following time frame: A college-level course of this type is generally limited to 36-40 hours of classroom time and two (2) weekend field trips approximately Friday morning through Sunday evening. The minimum prerequisite for an outdoor leadership course is a wilderness backpacking course or equivalent experience. This means that we can assume all participants have had experience with outdoor skills.

Please respond to each topic by putting an X in the square of your choice (X). If your rating is different from most of the others, please give your reason.

VI	I	LI	NI	U		
67	29	2	2	0	1.	Outdoor Leadership Objectives
31	33	16	8	12	2.	Stress, Use and Avoidance
2	5	24	56	13	3.	Basic Trap and Snare Techniques
3	44	23	20	10	4.	Publications

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VI	I	LI	NI	U		
16	51	18	5	10	5.	Program Types
20	44	28	8	0	6.	Physical Conditioning
13	44	28	12	3	7.	Winter Travel: Ski Mountaineering
20	44	16	8	2	8.	Winter Travel: Cross Country Skiing
41	44	11	2	2	9.	Program Goals
40	44	11	3	2	10.	Problem Solving, Analysis
44	43	11	2	0	11.	Small Group Dynamics
31	30	28	6	5	12.	Survival Skills: Summer
5	23	40	16	16	13.	Political Ecology
20	41	25	11	3	14.	Outdoor Living Skills: Fire Building
25	51	21	3	0	15.	Equipment Care
0	19	46	33	2	16.	Identification
44	43	11	2	0	17.	Avalanche Awareness
20	46	28	6	0	18.	Basic Principles of Ecology (Interrelationships)
20	54	16	2	8	19.	Assessment of Participant Confidence
0	15	47	31	7	20.	Basic Principles of Pacific Northwest History
2	46	31	13	8	21.	Hazards Analysis: Plants
11	31	40	16	2	22.	Mountaineering Skills: Ice
7	51	29	10	3	23.	Post Trip Reports
25	56	14	2	3	24.	Program Assessment
15	39	28	13	5	25.	Public Relations: Promotion
10	65	23	0	2	26.	Permits
5	28	50	15	2	27.	Identification of Plants
56	38	4	0	2	28.	Minimum Impact Philosophy

(continued next page)

VI	I	LI	NI	U		
23	34	34	7	2	29.	Improvised Direction Finding Techniques
36	35	21	3	5	30.	Definitions of Outdoor Leadership
43	41	10	2	4	31.	Assessment of Individual Capabilities
23	39	25	13	0	32.	Survival Skills: Fire
18	54	23	2	3	33.	Problem Students
20	57	11	7	5	34.	Facilitating Group Discussion
23	31	36	8	2	35.	Mountaineering Skills: Rock
8	38	44	8	2	36.	Equipment Trends
20	52	23	5	0	37.	Equipment Repairs
31	31	30	6	2	38.	Survival Skills: Mountain
5	10	51	31	3	39.	Basic Principles of Botany
33	38	21	8	0	40.	Survival Skills: Shelter
0	13	48	34	5	41.	Fishing
39	43	15	3	0	42.	Avalanche Safety
10	47	36	5	2	43.	Winter Camping: Tents
18	49	25	8	0	44.	Budget and Finance
28	53	16	3	0	45.	Food Nutrition
7	26	39	23	5	46.	Human Growth and Development
3	23	30	33	11	47.	Theories of Personality
26	50	13	8	3	48.	Hazards Analysis: Altitude
10	52	33	3	2	49.	Food Budgeting
72	23	3	2	0	50.	First-Aid
54	41	5	0	0	51.	Pre-trip Planning: Selection of Location
26	48	18	6	2	52.	Hazards Analysis: Sun/Snow Blindness
15	46	24	13	2	53.	Hazards Analysis: Animals

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VI	I	LI	NI	U		
5	31	43	16	5	54.	Campfire Activites
21	48	26	5	0	55.	Basic Knots
41	57	2	0	0	56.	Pre-trip Planning: Single and Multi-day or Week
2	23	49	24	2	57.	Basic Principles of Geography
2	23	46	26	3	58.	Star Navigation
13	41	33	10	3	59.	Individual Counseling Techniques
34	39	20	7	0	60.	Survival Skills: Body Needs
4	26	54	14	2	61.	Equipment Construction
0	20	55	23	2	62.	Identification of Animals
7	23	28	31	11	63.	Humanistic Psychology
3	41	36	18	2	64.	Functions of Land Management Agencies
3	33	34	28	2	65.	History of Outdoor Leadership
20	44	24	10	2	66.	Mountaineering Skills: Ice Axe
0	16	33	46	5	67.	Transportation: Automobile Mechanics
2	29	39	28	2	68.	Basic Principles of Geology
52	26	20	0	2	69.	Advanced First-Aid
62	30	8	0	0	70.	Wilderness Ethics
23	39	33	5	0	71.	Environmental Issues
5	33	40	11	11	72.	Transportation: Options
6	15	46	33	0	73.	Basic Principles of Zoology, Wildlife
6	56	32	6	0	74.	Food Packaging
26	41	25	8	0	75.	Orienteering
23	54	18	5	0	76.	Post-trip critique
5	54	34	5	2	77.	Methods of Field Resupply

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VI	I	LI	NI	U		
21	49	28	2	0	78.	Search and Rescue Management, Organizations and Politics
62	33	3	2	0	79.	Hazards Analysis: Hypothermia
49	41	5	3	2	80.	Teaching Methods and Techniques
49	41	10	0	0	81.	Small Group Dynamics in the Outdoors
41	49	8	2	0	82.	Environmental Awareness Skills
28	36	30	6	0	83.	Winter Camping: Snow Shelters
23	38	33	6	0	84.	Mountaineering Skills: Knots
23	41	30	6	0	85.	Mountaineering Skills: Snow
49	25	24	2	0	86.	Extended First-Aid for Long Trips (Professional Help Unavailable
3	25	51	19	2	87.	Basic Principles of Glaciology
8	13	33	43	3	88.	Transportation
0	16	32	49	3	89.	Outdoor Arts and Crafts
3	30	31	31	5	90.	Staff Meetings
44	44	10	2	0	91.	Decision-making
36	37	18	7	2	92.	Outdoor Living Skills: Backpacking
34	56	8	2	0	93.	Food Planning
5	21	46	26	2	94.	Basic Principles of Natural History
3	28	33	31	5	95.	Social Psychology
21	46	23	7	3	96.	Forecasting Pacific Northwest Weather
48	44	6	2	0	97.	Hazards Analysis: Hyperthermia
26	49	20	5	0	98.	Survival Skills: Water Sources
23	49	25	3	0	99.	River and Stream Crossings
3	26	43	25	3	100.	Environmental Groups
7	26	48	16	3	101.	Identification of Edible Plants

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VI	I	LI	NI	U		
2	8	38	45	7	102.	Outdoor Songs
23	59	14	2	2	103.	Assessment of Participant Needs
31	48	11	3	7	104.	Analysis of Outdoor Leadership
41	49	8	2	0	105.	Assessment of Group Capabilities
7	43	26	13	11	106.	Leadership of Special Populations
8	21	41	27	3	107.	Basic Principles of Meteorology
5	26	38	29	2	108.	Transportation: Automobile Emergencies
10	22	46	20	2	109.	Public Relations: Advertising
20	65	11	2	2	110.	Small Group Communication
34	51	10	5	0	111.	Evacuation
2	38	23	31	6	112.	Learning Theories
3	26	38	28	5	113.	Exercise Physiology
30	41	21	6	2	114.	Survival Skills: Winter
21	31	30	18	0	115.	Survival Skills: Signals
26	53	18	3	0	116.	Search Techniques
39	48	6	5	2	117.	Route Finding (Selection)
10	41	29	15	5	118.	Group Counseling Technique
18	29	42	11	0	119.	Survival Skills: Desert
28	46	21	3	2	120.	Outdoor Living Skills: Campsite Selection
2	33	42	13	10	121.	Program Agencies
18	57	12	8	5	122.	Staff Training
18	52	15	10	5	123.	Conflict Resolution
10	36	33	18	3	124.	Administrative Methods
49	46	5	0	0	125.	Outdoor Ethics

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VI	I	LI	NI	U		
31	47	15	5	2	126.	Staff Selection
18	35	36	8	3	127.	Mountaineering Skills: Rappels
18	57	18	5	2	128.	Equipment Acquisition and Management
15	57	25	3	0	129.	Environmental Interpretation
41	44	13	2	0	130.	Pre-trip Planning: Travel Time, Length (Itinerary)
23	38	31	6	2	131.	Outdoor Living Skills: Hiking
2	11	49	31	7	132.	Photography
18	33	28	15	6	133.	Advanced Navigation
7	39	34	15	5	134.	Community Resource Utilization
20	38	20	13	9	135.	Professionalism
0	3	44	46	7	136.	Basic Principles of Anthropology
41	38	18	3	0	137.	Mountain Medicine
30	46	16	5	3	138.	Equipment Use
7	30	34	21	8	139.	Basic Lashes
3	21	34	34	8	140.	Philosophies of Education
44	41	10	0	5	141.	Outdoor Leadership Methods
10	24	38	26	2	142.	Outdoor Living Skills: Camp Crafts, Wood Crafts
34	51	13	2	0	143.	Hazards Analysis: Terrain
6	32	39	21	2	144.	Initiative Games
2	16	43	37	2	145.	History of the Environmental Movement
67	28	3	0	2	146.	Risk Management Plans (Minimizing Risks, Emergency Plans, Prevention)
62	30	2	3	3	147.	Judgment
57	38	3	2	0	148.	Backcountry First-Aid
3	31	44	22	0	149.	Environmental Literature

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VI	I	LI	NI	U		
46	38	14	2	0	150.	Mapreading and Interpretation
10	41	39	8	2	151.	Land Management Agencies, Policies, and Regulations
16	39	28	15	2	152.	Group Psychology
2	15	52	31	0	153.	Identification of Birds
26	33	34	5	2	154.	Mountaineering Skills: Belays
39	39	20	2	0	155.	Hazards Analysis: Frostbite
10	41	23	16	10	156.	Certification
13	30	46	11	0	157.	Winter Travel: Snowshoes
28	46	24	2	0	158.	Food Preparation
41	47	5	5	2	159.	Teaching Principles for Leaders
23	41	28	5	3	160.	Wilderness Management Problems
39	39	18	4	0	161.	Equipment Essentials
13	38	39	8	2	162.	Survival Skills: Coast
33	47	13	5	2	163.	Avalanche Detection
49	43	8	0	0	164.	Liability Considerations
66	26	6	2	0	165.	Minimum Impact Practices
15	49	26	10	0	166.	Equipment Purchasing
3	31	41	13	12	167.	Sociology of Wilderness Users
24	41	23	8	3	168.	Understanding Pacific Northwest Weather
36	38	10	8	8	169.	Outdoor Leadership Roles
8	29	36	15	12	170.	Survival Skills: Primitive
61	34	3	2	0	171.	Analyzing Risks
36	46	11	5	2	172.	Legal Issues
40	41	16	3	0	173.	Rescue Techniques

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VI	I	LI	NI	U		
28	47	18	5	2	174.	Hazards Analysis: Altitude
39	34	15	7	5	175.	Philosophy of Outdoor Leadership
38	36	21	5	0	176.	Navigation